REMARKS

Reconsideration and allowance of this application are respectfully requested. Claims 1, 2, 4, 5, 7 and 10 have been amended. Claim 3 and 9 have been cancelled. Claims 1, 2, 4-8 and 10-12 are now pending in the application. The rejections are respectfully submitted to be obviated in view of the amendments and remarks presented herein.

Claim Objections

Claims 1, 4, 7 and 10 have been objected to because of alleged informalities. Claims 1, 4, 7 and 10 have been editorially amended to improve clarity. Accordingly, Applicant respectfully requests the Examiner to withdraw the outstanding objections to the claims.

Rejection Under 35 U.S.C. § 112, Second Paragraph

Claims 1 and 7 have been rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 7 have been editorially amended to improve clarity. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, second paragraph are respectfully requested.

Rejection Under 35 U.S.C. § 102(e) - Quayle

Claims 1 and 7 have been rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Quayle (U.S. Patent Number 6,317,234). The rejection is respectfully traversed.

Applicant's claimed invention relates to an apparatus and method of assigning bandwidth in a passive optical network transmission system. Transmission permission is generated for a

cell. The cell is stored in a buffer, and an idle cell is generated. The increasing and decreasing of idle cells is monitored, and bandwidth assignment is individually handled.

Turning to the cited art, Quayle discloses a communications network including an optical waveguide connected to a head-end station and at least one optical network unit (ONU) (3). However, the ONU in a subscriber unit requests transmission permissions for cells to the optical line terminal (OLT) (2) more than the number of cells stored in a buffer of the ONU (3). This is contrary to what Applicant claims.

Applicant's claimed invention assigns extra band constantly for an optical network unit in response to transmission permission of cells stored in the buffer of the optical network unit.

Quayle, however, cannot achieve a dynamic concentrated and constant band assignment in the OLT (2). Therefore, at least by virtue of the aforementioned differences, the invention defined by Applicant's claims 1 and 7, as amended, are patentable over Quayle. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(e) are respectfully requested.

Rejection Under 35 U.S.C. § 103(a) - Quayle in view of Sriram

Claims 2 and 8 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Quayle in view of Sriram (U.S. Patent Number 5,463,620). The rejection is respectfully traversed.

As established above, Quayle does not anticipate Applicant's invention as recited in amended claims 1 and 7. Sriram does not remedy the deficiencies of Quayle. Sriram discloses only the allocation of bandwidth and transmission scheduling in a broadband communications network. A call controller with bandwidth allocator (54) is shown in Figure 6. The call

controller and bandwidth allocator (54) admits or denies additional calls based on the availability of bandwidth (column 9, lines 9-11). However, there is also no mention in Sriram of assigning extra band constantly for an optical network unit in response to transmission permission of cells stored in the buffer of the optical network unit. Applicant's claims 2 and 8 are dependent claims including all of the elements of independent claims 1 and 7, respectively. At least by virtue of the aforementioned differences, the invention defined by Applicant's claims 2 and 8 are patentable over Quayle in view of Sriram. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are respectfully requested.

Rejection Under 35 U.S.C. § 103(a) - Quayle in view of Graves

Claims 4, 5, 10 and 11 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Quayle in view of Graves (U.S. Patent Number 6,519,255). The rejection is respectfully traversed.

As established above, Quayle does not anticipate Applicant's invention as recited in amended claims 1 and 7. Graves does not remedy the deficiencies of Quayle. Graves discloses only an optical network unit which is used in both narrowband and broadband services.

However, there is also no mention in Graves of assigning extra band constantly for an optical network unit in response to transmission permission of cells stored in the buffer of the optical network unit. Applicant's claims {4 and 5} and {10 and 11} are dependent claims including all of the elements of independent claims 1 and 7, respectively. At least by virtue of the aforementioned differences, the invention defined by Applicant's claims 2 and 8 are patentable

Attorney Docket No. Q62732

over Quayle in view of Graves. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are respectfully requested.

Rejection Under 35 U.S.C. § 103(a) - Quayle

Claims 6 and 12 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Quayle. The rejection is respectfully traversed.

As established above, Quayle does not anticipate Applicant's invention as recited in amended claims 1 and 7. Additionally, Quayle does not teach, suggest or render Applicant's invention as obvious. In particular, Quayle fails to teach or suggest assigning extra band constantly for an optical network unit in response to transmission permission of cells stored in the buffer of the optical network unit. Applicant's claims 6 and 12 are dependent claims including all of the elements of independent claims 1 and 7, respectively. At least by virtue of the aforementioned differences, the invention defined by Applicant's claims 6 and 12 are patentable over Quayle. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are respectfully requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111 U.S. Application No. 09/760,775 Attorney Docket No. Q62732

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

Registration No. 52,432

Lenny R. Jiang

SUGHRUE MION, PLLC

Telephone: (202) 293-7060 Facsimile: (202) 293-7860

washington office 23373 customer number

Date: February 14, 2005